

II. Claim Amendments

1. (Currently Amended) An input bearing adjuster system comprising:

a differential carrier having a set of threads on an interior surface;

~~an~~ a substantially horizontally oriented input bearing adjuster having a complementary set of threads on an exterior surface, said input bearing adjuster located entirely within said differential carrier;

an input bearing system of a differential comprising an outer race located radially inward from, and in contact with, said input bearing adjuster and an inner race in contact with an input shaft and an input bearing; and

a substantially vertically oriented locking mechanism extending substantially perpendicularly through said differential carrier to selectively secure said input bearing adjuster to said differential carrier;

wherein said threads of said bearing adjuster are engaged with said threads of said differential carrier to adjust ~~the preload or~~ the endplay of said input bearing.

2. (Original) The input bearing adjuster system according to claim 1, wherein said locking mechanism comprises a screw.

3. (Previously Presented) The input bearing adjuster system according to claim 1, wherein no endcap is attached to the differential carrier.

4. (Canceled)

III. Specification Amendments

Please amend the paragraph beginning at line 10, page 3 as follows:

Figure 2 illustrates an embodiment of the present invention. An input bearing adjuster system 10 includes a differential carrier assembly 12. The differential carrier assembly 12 comprises a set of threads 14 on an inner surface thereof. Adjacent the carrier 12 is an input bearing adjuster (or bearing cup) 16 having a set of threads 18 on an exterior surface. The threads 14 of the differential carrier assembly 12 and the threads 18 of the input bearing adjuster 16 are complementary to and mate with one another. As seen in Fig. 2, it is preferred that the input bearing adjuster 16 is housed substantially entirely within the differential carrier 12.

Please amend the paragraph beginning on page 3, line 16 as follows:

An input bearing system 20 includes an input bearing 22 and interior 24 and exterior 26 bearing races adjacent thereto. The exterior race 26 is adjacent to and makes contact with the input bearing adjuster 16, and the interior race 24 is adjacent to and makes contact with a shaft 28. The exterior race 26, as can be seen in Fig. 2, is thus located radially inward from the input bearing adjuster 16. The relative positioning of the differential carrier assembly 12 and the input bearing adjuster 16, can be used to adjust the preload and/or the endplay of input bearing system 20. This can be controlled by adjusting the positioning of the threads 14, 18 relative to one another, which moves the adjuster 16 in or out relative to the carrier 12.

Please amend the paragraph beginning on page 4, line 15 as follows:

In a preferred embodiment of the present invention, the locking mechanism 30 can engage with a slot or groove 32 placed in the input bearing adjuster 16, as shown in Figure 2. While the groove is depicted as being at the end of the input bearing adjuster 16, the groove 32 could also be positioned away from the end of the input bearing adjuster 16. Alternatively, the locking mechanism 30 can engage the outer surface of the input bearing adjuster 16 without the use of a groove, i.e. engaging the exterior of the bearing adjuster adjacent to the threaded area. With continuing reference to Fig. 2, it can be seen that the locking mechanism 30 is substantially vertically oriented with respect to the substantially horizontally oriented input bearing adjuster 16. The locking mechanism 30 preferably extends substantially perpendicularly through the differential carrier.